



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0395; Product Identifier 2017-NM-136-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A330-200 Freighter series airplanes, Model A330-200 series airplanes, Model A330-300 series airplanes, Model A340-200 series airplanes, Model A340-300 series airplanes, Model A340-500 series airplanes, and Model A340-600 series airplanes. This proposed AD was prompted by a report of deficient fatigue performance of high strength steel used in forgings. Components made from the affected high strength steel are installed on the main landing gear (MLG), nose landing gear (NLG), and center landing gear (CLG). This proposed AD would require identifying the part number and serial number of certain components installed on the MLG, NLG, and CLG; replacing affected parts; identifying the airplane's weight variant; and determining the applicable life limit for certain components installed on the MLG, NLG, and CLG. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0395; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office

(telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198-6547; telephone and fax 206-231-3229.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0395; Product Identifier 2017-NM-136-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0185, dated September 22, 2017 (referred to after this as the Mandatory Continuing Airworthiness

Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model A330-200 Freighter series airplanes, Model A330-200 series airplanes, Model A330-300 series airplanes, Model A340-200 series airplanes, Model A340-300 series airplanes, Model A340-500 series airplanes, and Model A340-600 series airplanes. The MCAI states:

In 2006, Messier-Dowty identified a deficiency in the fatigue performance of 300M high strength steel used in forgings. The root cause for this fatigue deficiency was the processing during preparation of the material. After investigation, it was determined that the following material sources (S) were affected by this fatigue deficiency: Electralloy (S1), RSM (S2A, S2B or S2C), Latrobe (S3) and Aubert et Duval (S4).

Consequently, reduced lives were calculated for certain landing gear main fittings, bogie beams and sliding pistons, determined to be affected by the 300M material properties quality issue. These components are installed on Main, Nose and Centre Landing Gears (MLG, NLG, CLG) of A330 and A340 aeroplanes.

This condition, if not corrected, could lead to structural failure of a landing gear, possibly resulting in loss of control of the aeroplane during take-off or landing.

To initially address this potential unsafe condition, Airbus published reduced life limits for the affected parts from material sources S1, S2 and S3 in the applicable Airworthiness Limitation Section (ALS) Part 1. Later, it was determined that ALS Part 1 was an inappropriate place for recording the reduced lives and Airbus published Service Bulletin (SB) A330-32-3281, SB A340-32-4310, and SB A340-32-5119, as applicable, to provide identification and replacement instructions for affected parts made of all material sources S1, S2, S3 and S4. This action was also accomplished to simplify Airbus ALS Part 1.

For the reasons described above, this [EASA] AD requires [identification of the part numbers and serial numbers of

the main fitting, bogie beam and sliding piston of the MLG, NLG, and CLG, and the airplane's weight variant], and implementation of the reduced life limits for the affected parts and replacement of any parts that are close to, or have exceeded the applicable reduced life limit.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0395.

Related Service Information under 1 CFR part 51

Airbus has issued the following service information. These documents are distinct since they apply to different airplane models.

- Service Bulletin A330-32-3281, Revision 02, dated June 16, 2017, including Appendixes 01 through 06; and Service Bulletin A340-32-4310, Revision 02, dated June 16, 2017, including Appendixes 01 through 06. This service information includes procedures for inspections to identify the part numbers and serial numbers of the main fittings, bogie beams, and sliding pistons of the MLG; and procedures for determining the airplane's weight variant. This service information also describes the reduced life limits for affected parts. These documents are distinct since they apply to different airplane models.

- Service Bulletin A340-32-5119, Revision 01, dated January 31, 2017, including Appendixes 01 through 07. This service information includes procedures for inspections to identify the part numbers and serial numbers of the main fittings and bogie beams of the MLG, NLG, and CLG; and procedures for determining the airplane's weight variant. This service information also describes the reduced life limits for affected parts.

In addition, Airbus has issued the following service information, which describes life limits for affected parts. These documents are distinct since they apply to different airplane models and to different life limited parts.

- A330 Airworthiness Limitations Section (ALS) Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Revision 09, dated September 18, 2017.
- A330 ALS Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Variation 9.2, dated November 28, 2017.
- A340 Airworthiness Limitations Section (ALS) Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Revision 09, dated September 18, 2017.
- A340 ALS Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Variation 9.2, dated November 28, 2017.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA’s Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Costs of Compliance

We estimate that this proposed AD affects 103 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$35,020

We have received no definitive data that would enable us to provide cost estimates for the on-condition part replacements specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2018-0395; Product Identifier 2017-NM-136-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(7) of this AD; certificated in any category; all manufacturer serial numbers.

(1) Model A330-201, -202, -203, -223, and -243 airplanes.

(2) Model A330-223F and -243F airplanes.

(3) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(4) Model A340-211, -212, and -213 airplanes.

(5) Model A340-311, -312, and -313 airplanes.

(6) Model A340-541 airplanes.

(7) Model A340-642 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a report of deficient fatigue performance of 300M high strength steel used in forgings. Components made of 300M high strength steel are installed on the main landing gear (MLG), nose landing gear (NLG), and center landing gear (CLG). We are issuing this AD to detect and correct parts made from 300M high strength steel, which if uncorrected, could lead to structural failure of the landing gear, and possibly loss of control of the airplane during take-off or landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definitions

(1) For the purpose of this AD, an affected part is any main fitting, bogie beam, or sliding piston of the MLG, NLG, or CLG installed on the airplane, having a part number and serial number combination specified in the applicable service information identified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(2) For the purpose of this AD, a serviceable part is any main fitting, bogie beam, or sliding piston of the MLG, NLG, or CLG that has not exceeded the applicable life limit specified in paragraph (g)(2)(i), (g)(2)(ii), or (g)(2)(iii) of this AD, since first installation on an airplane.

(i) The life limit specified in the applicable service information identified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(ii) The life limit specified in Airbus A330 Airworthiness Limitations Section (ALS) Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Revision 09, dated September 18, 2017, and A330 ALS Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Variation 9.2, dated November 28, 2017.

(iii) The life limit specified in Airbus A340 Airworthiness Limitations Section (ALS) Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Revision 09, dated September 18, 2017, and A340 ALS Part 1, “Safe Life Airworthiness Limitation Items (SL-ALI),” Variation 9.2, dated November 28, 2017.

(h) Identification of Part Number, Serial Number, Weight Variant, and Reduced Life Limit

Within 3 months after the effective date of this AD: Identify the part number and serial number of each main fitting, bogie beam, and sliding piston of the MLG, NLG, and CLG installed on the airplane; identify the airplane’s weight variant; and determine the applicable reduced life limit; in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (h)(1), (h)(2), or (h)(3) of this AD. A review of airplane maintenance records is acceptable for identification of the installed main fittings, bogie beams, and sliding pistons of the MLG, NLG, and CLG, provided the

part number and serial number of each component can be conclusively identified by that review.

(1) Airbus Service Bulletin A330-32-3281, Revision 02, dated June 16, 2017, including Appendixes 01 through 06.

(2) Airbus Service Bulletin A340-32-4310, Revision 02, dated June 16, 2017, including Appendixes 01 through 06.

(3) Airbus Service Bulletin A340-32-5119, Revision 01, dated January 31, 2017, including Appendixes 01 through 07.

(i) Replacement of Affected Parts

Prior to exceeding the applicable life limit, as specified in the applicable service information identified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, or within 3 months after the effective date of this AD, whichever occurs later: Replace each affected part (as defined in paragraph (g)(1) of this AD) with a serviceable part (as defined in paragraph (g)(2) of this AD).

(j) Parts Installation Specification

As of the effective date of this AD, any affected part (as defined in paragraph (g)(1) of this AD) may be used as a replacement part, provided the affected part is also a serviceable part (as defined in paragraph (g)(2) of this AD), and following installation, the affected part is replaced prior to exceeding the applicable life limit as specified in paragraph (g)(2) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated

from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0185, dated September 22, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0395.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198-6547; telephone and fax 206-231-3229.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. Issued in Des Moines, Washington, on April 30, 2018.

Dionne Palermo,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

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